

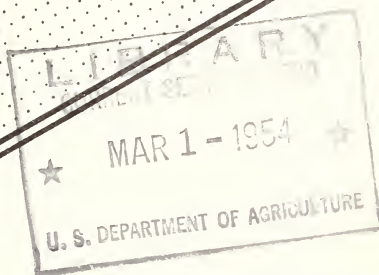
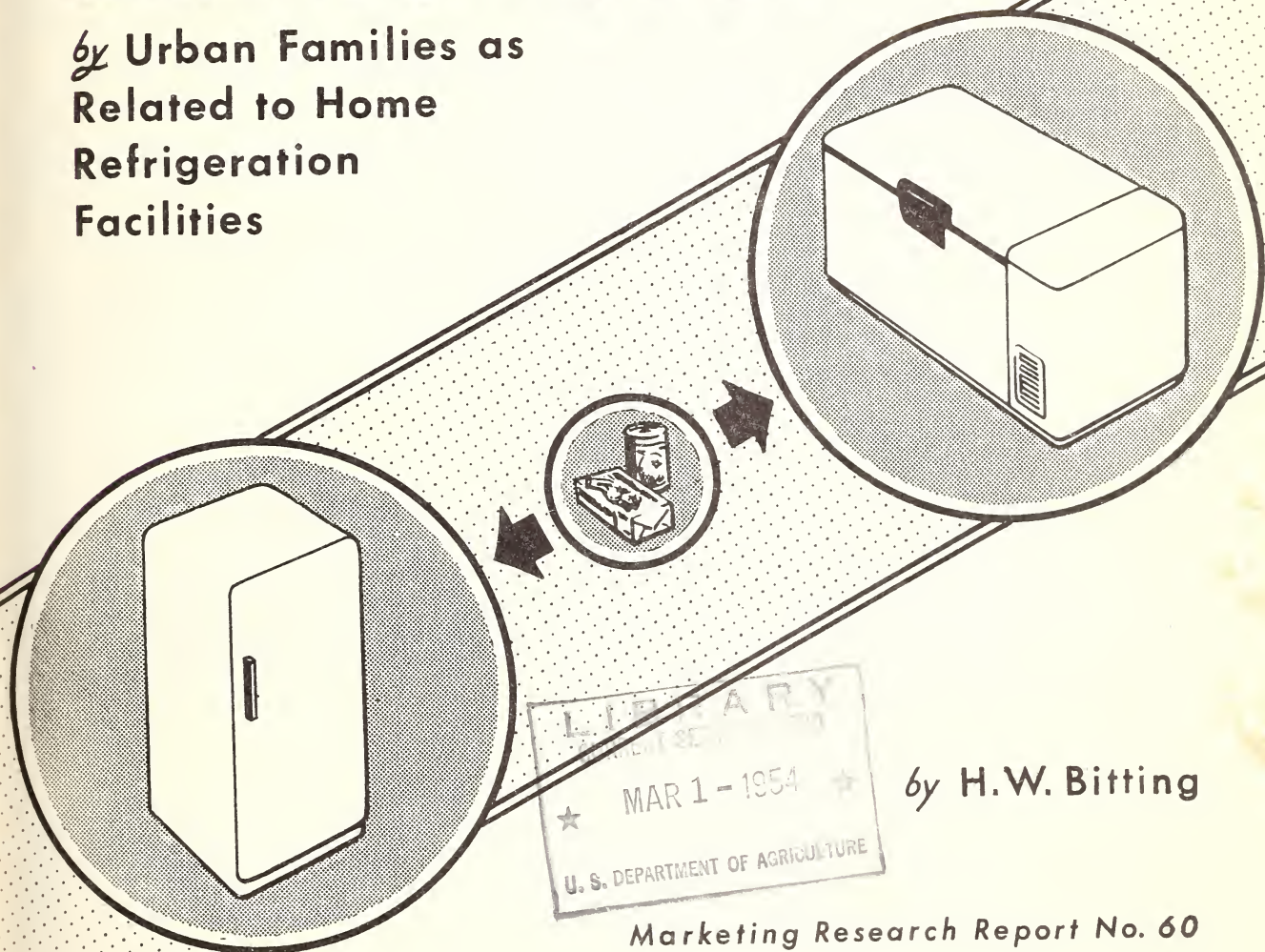
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

Ag 84 MR
up-3

Purchases of **FROZEN AND CANNED FOODS**

by Urban Families as
Related to Home
Refrigeration
Facilities



by H.W. Bitting

Marketing Research Report No. 60

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Washington, D. C.
February 1954

CONTENTS

	Page
Number of families buying frozen foods	1
Extent of purchases by families buying frozen foods	2
Purchases of canned and frozen foods	5
Effect of income on purchases of frozen and canned foods	8
Regional differences in frozen and canned food purchases	13

The data were supplied by the Market Research Corporation of America under contract with the United States Department of Agriculture, as authorized by the Agricultural Marketing Act of 1946 (RMA Title II). The data represent family purchases during 1952 of the urban family part of the panel living in cities over 2,500 population as contained in the Market Research Corporation of America's static sample.

PURCHASES OF FROZEN AND CANNED FOODS BY URBAN FAMILIES

AS RELATED TO HOME REFRIGERATION FACILITIES

By H. W. Bitting, Agricultural Economist
Market Organization and Costs Branch

During the last 7 years the output of frozen foods has more than tripled. The limit of this expansion has not yet been reached. Farmers, processors, and distributors are interested in gaging the probable trend of the market for frozen foods and the effect which the increased use of frozen items may have upon sales of canned and fresh foods.

The study reported here was undertaken to give a basis for judging the potential market for some of the major frozen foods. It is based upon purchases by urban families of 12 frozen and 6 canned items. The study shows the possibilities for a substantial further increase in sales of the items studied.

Information on urban-family purchases of 12 frozen items (green peas, lima beans, snap beans, spinach, broccoli, cut corn, strawberries, orange juice concentrate, lemonade, whole chicken, chicken parts, and fish fillets) and 6 canned items (peas, whole kernel corn, orange juice, lima beans, snap beans, and spinach) during the calendar year 1952 was obtained for 2,040 families with 6,933 family members. 1/ The family purchase data were separated for each of four regions--(1) Northeast, (2) South, (3) North Central, and (4) Pacific, Mountain, and Southwest. Families were separated into two income groups: (1) Those having incomes of more than \$3,000 and (2) those with incomes of less than \$3,000. For each income group and region family purchase data were reported separately for each family which: (1) Owned a freezer through 1952; (2) bought a freezer in 1952; (3) owned a refrigerator with a frozen food compartment; (4) owned an ordinary refrigerator; and (5) owned neither a freezer nor a refrigerator.

NUMBER OF FAMILIES BUYING FROZEN FOODS

Only 3 of the 12 frozen items studied were bought by more than 50 percent of the families in the panel. These 3 items were frozen orange juice concentrate, frozen peas, and frozen strawberries, which were bought by 68, 52 and 50 percent of the potential users. For most of the 12 frozen items there appeared to be no significant differences between those

1/ According to the 1950 Census approximately two-thirds of the total United States population reside in towns of 2,500 and over.

owning refrigerators only and those owning home freezers in the proportion of families buying frozen foods (table 1). Families that bought home freezers during the year tended to buy more of the frozen items but these differences were not statistically significant. Families who owned neither a refrigerator nor a home freezer had a smaller proportion of potential consumers buying frozen foods. The difference between frozen food purchases by owners and nonowners of refrigeration facilities was marked. 2/

According to the findings of this study many families did not buy any of the major frozen items during the entire year. Therefore, a substantial part of the potential market for frozen foods is made up of families that are not now buying frozen foods.

EXTENT OF PURCHASES BY FAMILIES BUYING FROZEN FOODS

Also, many of those families that do buy some frozen foods, buy them irregularly and in small quantities. Of the 12 items studied the average amount bought per family in 1952 ranged from a low of 3.5 packages of frozen whole chicken to a high of 44 6-ounce cans of frozen orange juice concentrate (table 2). The average per capita amounts ranged from 1 package of whole chicken to 13 6-ounce cans of frozen orange juice concentrate. Per capita purchases of green peas were only 4.2 packages, or roughly 14 packages per family. Aside from frozen green peas and orange juice concentrate, all yearly purchases of the remaining 10 items studied amounted to less than 3 packages per individual. These figures are based upon families that bought the particular frozen item; the averages would have been considerably lower had all families been included.

The Agricultural Marketing Service calculates civilian per capita consumption of frozen foods based upon the disappearance of each frozen item into commercial channels (table 3). These data include the quantities taken by institutional users as well as by households. Hence the Agricultural Marketing Service per capita consumption data should be higher than per capita consumption based upon consumer-sized units. However, a recent survey in Ohio showed that urban consumers tend to buy more frozen foods than do rural families. 3/ There is additional evidence that this relationship holds for other areas. Therefore, it is to be expected that the per capita consumption data obtained in this study would tend to be higher than the average for all persons in the United States.

2/ According to the 1950 Census 87 percent of the urban families owned refrigerators and 80 percent of all families owned refrigerators. It is estimated that in 1952 approximately 89 percent of the urban families owned refrigerators.

3/ Sherman, R. W., and Sharp, J.W. Use of Frozen Foods in Ohio. Ohio Agr. Expt. Sta. Research Bull. 714, April 1953. pp. 11.

Table 1.- Percentage of families who bought selected frozen foods, by ownership category of food storage facilities, 1952 1/

Commodity	January 1, 1952, to January 1, 1953										Total : all : types
	Freezer : Bought		: Owned refrigerators :		: Nonowners of :		: refrigerators :		: and freezers :		
	owners : thru 1952 :	freezers : during 1952 :	with frozen food compartments :	owned refrigerators :	ordinary refrigerators :	freezers : and freezers :	Percent	Percent	Percent	Percent	
Frozen:											
Peas	56	61	57	52	26	52					52
Lima beans	43	61	50	44	15	44					45
Snap beans	30	40	37	35	4	35					34
Spinach	36	53	36	35	18	35					35
Broccoli	36	47	39	34	8	34					35
Out corn (whole kernels)	26	44	30	23	3	23					25
Strawberries	29	58	54	53	24	53					50
Orange juice (concentrate)	74	74	70	68	39	68					68
Lemonade	37	39	42	33	17	33					36
Whole chicken	18	22	26	26	30	26					25
Chicken parts	13	17	19	19	15	19					18
Fish fillets	37	50	46	43	26	43					43

1/ Includes 506 consumers in families having home freezers; 171 consumers in families buying freezers during the year; 2,232 consumers in families having refrigerators with frozen food compartments; 3,648 consumers in families having ordinary refrigerators; and 170 consumers in families not having either a refrigerator or home freezer. The total includes 6,933 consumers (6,727 listed by separate category of refrigeration ownership plus 23 unknown for freezer or refrigerator ownership plus 183 nonowners of freezers but unknown for refrigerators).

Table 2.- Average number of packages of selected frozen foods purchased by families buying, 1952

Commodity	:	Packages				
	:	Per	:	Per	:	Weight
	:	capita	:	family 1/	:	
	:	<u>Number</u>		<u>Number</u>		<u>Ounces</u>
	:					
	:					
Peas	:	4.2		14.3		10
Lima beans	:	2.6		8.8		10
Snap beans	:	2.6		8.8		10
Spinach	:	2.4		8.2		14
Broccoli	:	2.0		6.8		10
Cut corn	:	1.7		5.8		10
Strawberries	:	2.5		8.5		10
Orange juice concentrate	:	12.9		43.8		6
Lemonade	:	2.4		8.2		6
Whole chicken	:	1.0		3.5		32
Chicken parts	:	1.4		4.8		16
Fish fillets	:	1.6		5.4		16

1/ There were 2,040 families with 6,933 family members. This gave an average of 3.4 members per family.

Table 3.- Average per capita consumption of selected frozen foods, U. S. civilians and urban families, 1952

Commodity	Average per capita consumption		
	U. S.	Urban family sample 2/	
	civilians 1/	All members	Consuming members
	Pounds	Pounds	Pounds
Green peas	1.14	1.39	2.66
Lima beans	.70	.73	1.64
Snap beans	.52	.54	1.59
Spinach	.49	.72	2.07
Broccoli	.43	.43	1.23
Cut corn	3/	.27	1.06
Strawberries	1.19	.77	1.54
Orange juice concentrate	3.01	4/3.29	4.83
Lemonade	.32	.33	.91
Whole chicken	3/	.52	2.08
Chicken parts	3/	.26	1.40
Fish fillets	3/	.68	1.58

1/ Based upon the total disappearance of frozen items into commercial channels as calculated by the Agricultural Marketing Service.

2/ Based upon Market Research Corporation of America's family purchase data from their static sample of urban families living in cities of more than 2,500 population.

3/ Not available.

4/ Based upon 16 fluid ounces.

With the exception of frozen strawberries, the per capita consumption data in this study are slightly higher than the Agricultural Marketing Service per capita consumption data based upon total disappearance of each frozen item.

Per capita consumption data for families that buy the frozen items were included in table 3 to show that these figures greatly exceed per capita consumption for all families. This reflects the fact that in most cases less than half the families bought any one of the listed frozen foods.

PURCHASES OF CANNED AND FROZEN FOODS

For peas, whole kernel corn, and snap beans more families bought the canned products than the frozen items. This relationship held true irrespective of whether these families owned refrigerators or home freezers (table 4). But more families who owned either a refrigerator or a home freezer bought frozen orange juice concentrate, frozen lima beans, and frozen spinach than bought the corresponding canned items. In each case, more of the nonowners of refrigerators and home freezers bought canned foods than bought the frozen items.

Some families bought neither the canned nor the frozen product. In the case of whole kernel corn, only 25 percent of the families bought the frozen product and 71 percent the canned. This could account for as much as 96 percent of the families if none of the purchasers of canned corn bought the frozen product. Similarly, for lima beans, snap beans, and spinach, the combined number of families who bought the canned and frozen products amounted to less than 100 percent of the families in the panel. However, in the case of the latter three items the purchase data for the canned products covered only 7 months, as shown in table 4. The corresponding purchases of frozen products were also calculated for the 7-month period in order to provide comparable information.

Average quantities of canned peas, corn and snap beans purchased by families buying these products were more than twice the quantities purchased in frozen form (table 5). In addition more of the families bought these canned products. Per capita purchases of canned and frozen lima beans were about the same and so was the number of families buying each product. In contrast, the per capita purchases of frozen orange juice and frozen spinach exceeded purchases of the canned product. More families bought frozen orange juice than bought canned orange juice. (The quantity of frozen orange juice concentrate must be quadrupled in order to obtain the single-strength amount which is comparable to canned orange juice). The number of families that bought frozen spinach was only slightly greater than the number of those who bought canned spinach.

Table 4.- Percentage of families who bought selected frozen and canned foods, by ownership category of food storage facilities, 1952 1/

Commodity	January 1, 1952, to January 1, 1953					
	Freezer owners : through 1952 :		Owned refrigerators : with frozen food : compartments :		Nonowners of : refrigerators : and freezers :	
	Percent	Percent	Percent	Percent	Percent	Percent
Frozen:						
Peas	56	61	57	52	26	52
Whole kernel corn	26	44	30	23	3	25
Orange juice concentrate	74	74	70	68	39	68
Canned:						
Peas	75	77	89	88	92	87
Whole kernel corn	57	78	76	71	76	71
Orange juice	44	51	49	53	73	51
January 1, 1952, to July 26, 1952 (7 months)						
Frozen:						
Lima beans	39	58	41	37	15	38
Snap beans	25	34	31	28	1	28
Spinach	29	50	31	28	8	29
Canned:						
Lima beans	30	33	39	37	41	37
Snap beans	45	55	63	62	65	61
Spinach	20	34	26	26	42	27

1/ Includes 506 consumers in families having home freezers; 171 consumers in families buying freezers during the year; 2,232 consumers in families having refrigerators with frozen food compartments; 3,648 consumers in families having ordinary refrigerators, and 170 consumers in families having neither a refrigerator or a home freezer. All categories includes 6,933 consumers. (6,727 listed by separate category of refrigeration ownership plus 23 unknown for freezer or refrigerator ownership plus 183 nonowners of freezers but unknown for refrigerators.)

Table 5.- Per capita purchases of families who bought selected frozen and canned foods, by ownership of food storage facilities, 1952 1/

Commodity	January 1, 1952, to January 1, 1953					
	: Freezer owners : through 1952 :	: Bought freezers : during 1952 :	: Owned refrigerators : with frozen food compartments :	: Owned ordinary : refrigerators :	: Nonowners of : refrigerators :	: All categories :
	Ounces	Ounces	Ounces	Ounces	Ounces	Ounces
Frozen:						
Peas	49.6	47.1	46.4	39.5	44.2	42.5
Whole kernel corn	14.2	14.2	19.1	16.1	5.2	16.9
Orange juice concentrate	2/ 70.9	2/ 92.2	2/ 80.9	2/ 77.4	2/ 10.1	2/ 77.3
Canned:						
Peas	72.9	67.1	89.9	88.4	101.5	88.3
Whole kernel corn	34.6	30.1	39.7	41.0	32.9	39.6
Orange juice	3/ 99.5	3/ 53.8	3/ 129.8	3/ 116.8	3/ 96.5	3/ 116.8
January 1, 1952, to July 26, 1952 (7 months)						
Frozen:						
Lima beans	15.9	19.0	19.7	17.7	12.6	18.2
Snap beans	23.7	12.5	19.5	16.1	10.0	17.7
Spinach	23.5	13.9	23.5	23.2	32.0	23.0
Canned:						
Lima beans	16.3	19.8	19.2	19.0	29.6	19.1
Snap beans	36.7	48.8	48.7	48.0	48.1	47.3
Spinach	21.1	22.4	22.3	20.4	21.5	21.1

1/ Includes 506 consumers in families having home freezers; 171 consumers in families buying freezers during the year; 2,232 consumers in families having refrigerators with frozen food compartments; 3,648 consumers in families having ordinary refrigerators, and 170 consumers in families having neither a refrigerator or a home freezer. All categories include 6,933 consumers (6,727 listed by separate category of refrigeration ownership plus 23 unknown for freezer or refrigerator ownership plus 183 nonowners of freezers but unknown for refrigerators).

2/ Must be quadrupled to obtain single-strength fluid ounces.

3/ Reported in single-strength fluid ounces.

There was no consistent pattern in the purchases of the six canned foods studied among the ownership categories of frozen food-storage facilities. Owners of home freezers tended to buy fewer canned products than the other ownership categories and nonowners of refrigerators and home freezers tended to buy more canned products.

EFFECT OF INCOME ON PURCHASES OF FROZEN AND CANNED FOODS

More of those families with incomes of less than \$3,000 a year bought canned peas, canned orange juice, canned lima beans, and canned spinach than did families with yearly incomes of more than \$3,000. The reverse was true for canned cut corn, where more of the higher income families bought canned corn than did families with yearly incomes of less than \$3,000. No significant difference that could be associated with differences in family income was found in purchases of canned snap beans (table 6).

The purchase pattern for frozen foods appeared to be the reverse of that for canned foods. More of the higher income families (those with incomes of more than \$3,000 a year) bought frozen foods for each of the 12 frozen items studied. Nevertheless, only a small proportion of the higher income families bought frozen foods. Six of the 12 frozen commodities studied were bought by less than 40 percent of the higher income families who owned home freezers and refrigerators having frozen food compartments. These items included frozen whole kernel corn, snap beans, spinach, broccoli, whole chickens, and chicken parts (table 6).

Per capita consumption for the canned items was higher for the lower income families. This relationship held for each of the six canned items studied (table 7). In contrast, per capita consumption for frozen foods tended to be higher in the higher income families (table 7). This relationship was found for 7 of the 12 frozen commodities--frozen peas, orange juice concentrate, lima beans, cut corn, snap beans, spinach, and broccoli. In the case of frozen strawberries and frozen lemonade, the differences in per capita consumption associated with income did not appear to be significant. For frozen fish fillets, whole chickens, and chicken parts, per capita consumption for the lower income families was higher than it was for the higher income families. However, there were more families in the higher income category that bought these products.

Table 6.- Percentage of families purchasing selected frozen and canned foods, by ownership of food storage facilities and by family income category, 1952 1/

January 1, 1952, to January 1, 1953

Commodity	Percentage of consumers purchasing with incomes of -											
	Under \$3,000				\$3,000 and over							
	Owner of -			Nonowner :	Owner of -			Nonowner :				
	:Refriger-:	: of	:All	:Refriger-:	:Refriger-:	:ator with:Ordinary :	: freezer :	: of	:ator with:Ordinary :	: freezer :	: or :	All
	:Freezer :	:frozen :	:refriger-:	: or :	:Freezer :	:frozen :	:refriger-:	: or :	:Freezer :	:frozen :	:refriger-:	: or :
	: food com-:	:ator :	:refriger-:	: gories :	: food com-:	:ator :	:refriger-:	: gories :	: food com-:	:ator :	:refriger-:	: gories :
	:partment :	:ator :	:ator :	:ator :	:partment :	:ator :	:ator :	:ator :	:partment :	:ator :	:ator :	:ator :
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Frozen:												
Peas	24	38	20	36	58	61	56	34	72	36	57	
Lima beans	24	41	15	35	45	51	46	15	49	32	47	
Snap beans	5	24	--	21	32	40	39	8	32	24	38	
Spinach	13	24	20	25	37	38	37	16	27	25	38	
Broccoli	29	23	2	23	36	43	37	14	20	20	38	
Cut corn	11	17	5	17	27	33	24	--	45	44	27	
Strawberries	32	37	31	39	29	58	56	15	72	76	53	
Orange juice												
concentrate	68	57	31	53	74	73	72	49	36	32	72	
Lemonade	--	33	4	24	40	44	36	32	27	24	39	
Whole chicken	--	30	35	23	19	25	27	24	20	25	26	
Chicken parts	13	11	7	14	13	21	20	25	45	44	19	
Fish fillets	18	42	11	34	39	47	45	89	88	89	45	
Canned:												
Peas	95	91	95	90	74	88	88	89	72	72	87	
Whole kernel												
corn	47	72	80	69	58	76	72	72	53	76	72	
Orange juice	76	56	70	58	42	47	53	50				
Frozen:												
Lima beans	24	32	15	29	40	43	40	15	40	15	40	
Snap beans	5	18	--	16	26	34	32	1	32	1	31	
Spinach	13	22	3	19	31	33	31	14	31	14	32	
Canned:												
Lima beans	34	44	40	40	30	37	37	43	63	63	36	
Snap beans	26	69	67	60	47	62	63	63	27	44	61	
Spinach	39	32	41	29	18	25	27	44			26	

1/ Includes 506 consumers in families having home freezers; 2,232 consumers in families having refrigerators with frozen food compartments; 3,648 consumers in families having ordinary refrigerators, and 170 consumers in families having neither a refrigerator nor a home freezer. All categories include 6,933 consumers (6,727 listed by separate category or refrigeration ownership plus 23 unknown for freezer or refrigerator ownership plus 183 nonowners of freezers but unknown for refrigerators).

Table 7. - Per capita consumption of families purchasing selected frozen and canned foods,
by ownership of food storage facilities and by family income groups, 1952 1/
January 1, 1952, to January 1, 1953

Commodity	Per capita consumption by consumers with incomes of									
	Under \$3,000					\$3,000 and over				
	Owner of :Refriger-: :ator : with : frozen : food com- : partment :	Nonowner: : of : freezer : or :refriger-: :ator : food com- : partment :	All : categories : of refrigerators : and freezers : in families : having neither : a refrigerator : nor a freezer	Owner of :Refriger-: :ator : with : frozen : food com- : partment :	Nonowner: : of : freezer : or :refriger-: :ator : food com- : partment :	All : categories : of refrigerators : and freezers : in families : having neither : a refrigerator : nor a freezer	Owner of :Refriger-: :ator : with : frozen : food com- : partment :	Nonowner: : of : freezer : or :refriger-: :ator : food com- : partment :	All : categories : of refrigerators : and freezers : in families : having neither : a refrigerator : nor a freezer	Owner of :Refriger-: :ator : with : frozen : food com- : partment :
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Frozen:										
Peas	1.18	2.54	2.51	0.81	3.16	2.95	2.46	0.94	2.69	
Lima beans	1.01	1.48	1.60	1.57	1.50	1.77	1.59	1.41	1.66	
Snap beans	.31	1.34	1.38	--	2.05	1.85	1.47	.31	1.63	
Spinach	.18	1.72	1.92	.92	2.17	2.20	2.09	2.29	2.10	
Proccoli	.28	1.21	1.23	.31	1.26	1.29	1.23	.68	1.24	
Cut corn	.16	1.28	.93	.32	.91	1.18	1.03	--	1.07	
Strawberries	1.34	1.93	1.51	.88	2.47	1.61	1.38	1.88	1.53	
Orange juice concentrate	2/1.93	2/3.68	2/4.53	2/.59	2/4.62	2/5.29	2/4.90	2/.66	2/5.00	
Lemonade	--	.93	1.02	2.02	.97	.91	.86	.13	.90	
Whole chicken	--	1.75	2.69	1.83	2.46	2.27	1.72	1.53	1.99	
Chicken parts	.60	1.42	1.83	1.30	1.61	1.48	1.29	1.98	1.36	
Fish fillets	2.22	1.56	2.13	4.32	1.99	1.53	1.49	2.04	1.50	
Canned:										
Pears	6.45	6.01	6.20	7.29	4.36	5.53	5.33	5.18	5.29	
Whole kernel corn	4.06	3.16	3.20	1.64	2.97	2.34	2.39	2.60	2.35	
Orange juice	3/6.38	3/7.60	3/9.21	3/7.64	3/8.23	3/8.24	3/6.73	3/4.31	3/7.02	
January 1, 1952, to July 26, 1952 (7 months)										
Frozen:										
Lima beans	.58	1.14	1.15	.93	1.11	1.02	1.10	.62	1.14	
Snap beans	.31	.94	1.00	--	.99	1.50	1.01	.62	1.12	
Spinach	.18	1.08	1.53	1.75	1.38	1.52	1.44	2.07	1.45	
Canned:										
Lima beans	2.07	1.42	1.46	2.46	1.54	.92	1.14	1.20	1.10	
Snap beans	1.64	3.30	3.08	2.93	3.15	2.32	2.98	3.10	2.91	
Spinach	1.46	1.49	1.32	1.57	1.41	1.29	1.26	1.10	1.30	

1/ Includes 506 consumers in families having home freezers; 2,232 consumers in families having refrigerators with frozen food compartments; 3,648 consumers in families having ordinary refrigerators, and 170 consumers in families having neither a refrigerator nor a home freezer. All categories include 6,933 consumers. (6,727 listed by separate category of refrigeration ownership plus 23 unknown for freezer or refrigerator ownership plus 183 non-owners of freezers but unknown for refrigerators).

2/ Must be quadrupled to obtain single-strength fluid ounces.

3/ Reported in single-strength fluid ounces.

REGIONAL DIFFERENCES IN FROZEN AND CANNED FOOD PURCHASES

There were significant differences among regions in per capita consumption of individual frozen fruits and vegetables as well as in the percentage of families buying these items. The United States population distribution by National Consumer Panel regions is shown in figure 1.

The Northeastern region had the highest per capita consumption for most of the frozen foods. Also, for most of the frozen foods it had the highest percentage of families buying. The Pacific, Mountain, and Southwestern region ranked second in per capita consumption and percentage of families buying. The North Central area was lowest in per capita consumption for 6 of the 12 frozen items studied. The South was lowest in 4 of the 12 frozen items. The North Central area had more families buying than did the South (tables 8 and 9).

Regional differences in food habits were apparent. For example, the South was either highest or next highest in both per capita consumption and percentage of families buying frozen lima beans, broccoli, and spinach. It was lowest or next lowest for frozen peas, orange juice concentrate, lemonade, and corn.

For only three frozen items did the North Central area rank highest or next to highest in either per capita consumption or percentage of families buying. These items were frozen orange juice concentrate, strawberries, and frozen whole chickens. Only 25 percent of the families bought frozen whole chickens in the North Central area, whereas frozen orange juice concentrate was bought by 67 percent of the families in the area.

The purchase pattern for the six canned items studied was almost the reverse of the purchase pattern for frozen foods. The Northeastern region was either lowest or next to lowest in percentage of families buying for the six canned items studied.

U. S. POPULATION DISTRIBUTION BY NATIONAL CONSUMER PANEL REGIONS

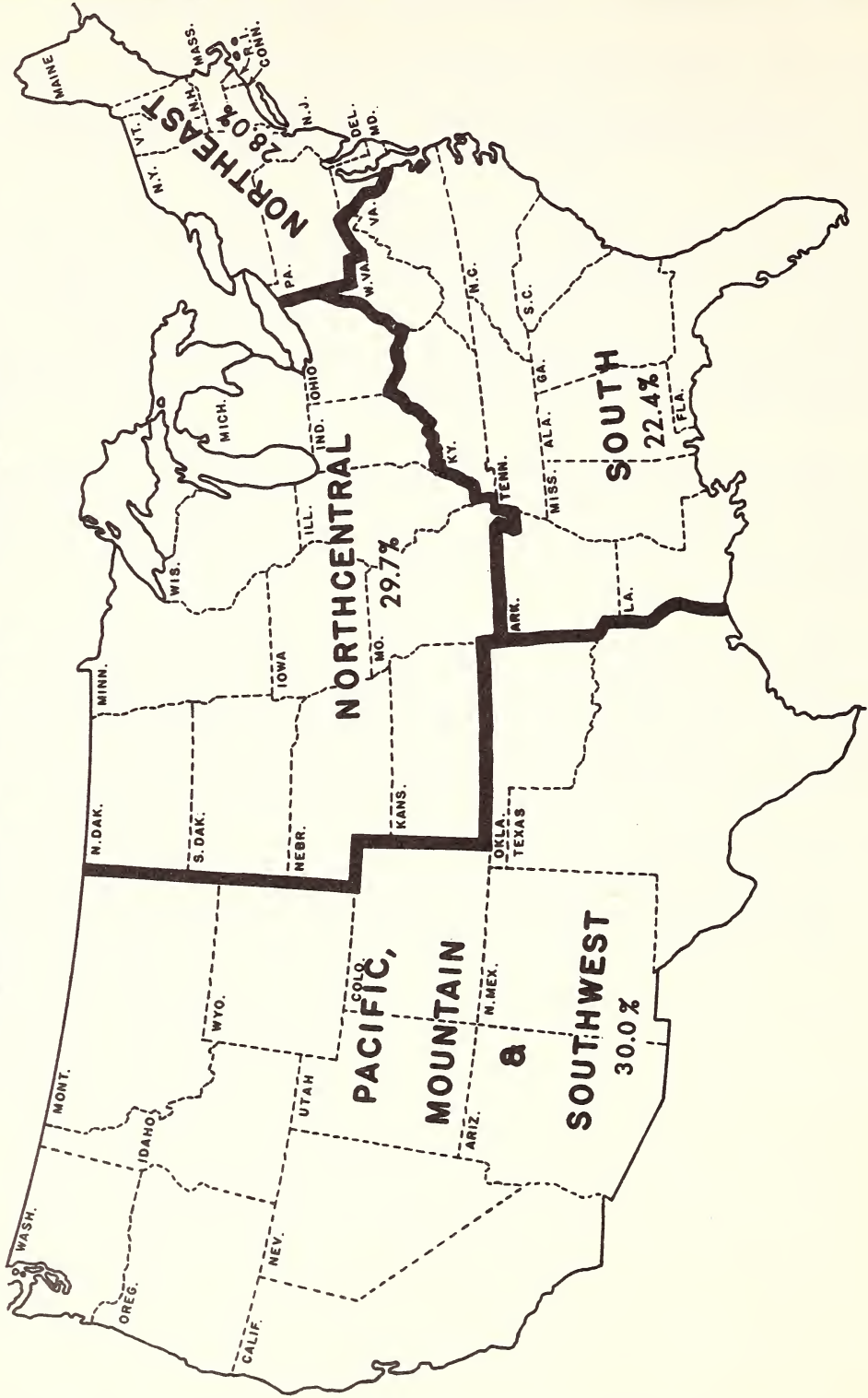


Figure 1

Table 8.- Percentage of families who bought selected frozen and canned foods, by regions, 1952

January 1, 1952, to January 1, 1953				
Commodity	North-east	North Central	South	Pacific, Mountain, and Southwest (combined)
	Percent	Percent	Percent	Percent
Frozen:				
Green peas	54	50	43	60
Lima beans	45	37	58	46
Snap beans	41	29	25	37
Spinach	45	29	32	30
Broccoli	41	30	36	32
Cut corn	24	23	21	33
Strawberries	55	49	52	43
Orange juice concentrate	75	67	58	65
Lemonade	43	33	29	33
Whole chicken	20	25	23	36
Chicken parts	12	23	17	24
Fish fillets	46	47	36	35
Canned:				
Pears	85	90	92	83
Whole kernel corn	71	74	63	75
Orange juice	43	55	65	52
January 1, 1952, to July 26, 1952 (7 months)				
Frozen:				
Lima beans	39	30	51	39
Snap beans	36	22	20	29
Spinach	38	25	23	25
Canned:				
Lima beans	32	39	50	34
Snap beans	54	64	59	69
Spinach	19	31	26	34

Table 9.- Per capita purchases of families who bought selected frozen and canned foods, by regions, 1952

January 1, 1952, to January 1, 1953				
Commodity	: Northeast	: North Central	: South	: Pacific, Mountain, and Southwest (combined)
	: Pounds	: Pounds	: Pounds	: Pounds
Frozen:	:	:	:	:
Green peas	: 3.12	1.79	1.52	3.56
Lima beans	: 1.87	1.19	1.88	1.59
Snap beans	: 1.80	1.23	1.26	1.77
Spinach	: 2.42	1.55	1.98	1.93
Broccoli	: 1.24	1.07	1.47	1.27
Cut corn	: 1.26	.80	.86	1.15
Strawberries	: 1.44	1.69	1.61	1.44
Orange juice concentrate	: <u>1/</u> 6.16	<u>1/</u> 4.21	<u>1/</u> 3.67	<u>1/</u> 3.79
Lemonade	: .93	.80	.69	1.17
Whole chicken	: 2.09	2.28	1.56	2.08
Chicken parts	: 1.71	1.28	1.40	1.29
Fish fillets	: 1.85	1.31	2.13	1.12
Canned:	:	:	:	:
Peas	: 5.74	5.03	5.46	5.97
Whole kernel corn	: 2.51	2.58	2.20	2.41
Orange juice	: <u>2/</u> 7.16	<u>2/</u> 7.78	<u>2/</u> 7.41	<u>2/</u> 6.63
January 1, 1952, to July 26, 1952 (7 months)				
Frozen:	:	:	:	:
Lima beans	: 1.30	.86	1.22	1.11
Snap beans	: 1.22	.84	.93	1.27
Spinach	: 1.71	1.08	1.36	1.28
Canned:	:	:	:	:
Lima beans	: 1.11	1.00	1.65	1.24
Snap beans	: 3.00	2.85	2.97	3.03
Spinach	: 1.07	1.36	1.19	1.60

1/ Must be quadrupled to obtain single-strength fluid ounces.
2/ Reported in single-strength fluid ounces.

